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(71) Applicant: IZAWA KOGYO KK

(72) Inventor: IZAWA KIYOSHI

(54) RING FILE AND SHAPING GUIDE OF
LOOSE-LEAF USED FOR RING FILE

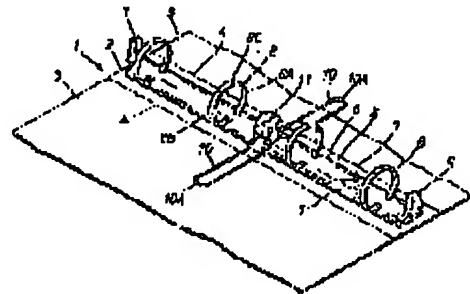
(57) Abstract:

PROBLEM TO BE SOLVED: To arrange loose-leaves in a superposed state on a back part of a cover at the time of closing the cover of a ring file.

SOLUTION: In the ring file in which a file binder 5 is fixed to a back part 2 of a cover 1, a shaping guide formed of a pair of opening/closing wings 10 and their holder 11 is mounted at a body frame 6 for forming a base of the binder 5. The wings 10 are pivotally secured at one ends to the holder 11 at inner positions from rings 8 in the state opened at both sides, and free ends 10A are arrived at both sides 3 over the part 2 of the cover 1. And, loose-leaves are filed by the rings 8 between the wings 10. When the cover 1 is closed,

the wings 10 are directed toward a closing direction therewith, and inside edges of the loose-leaves are lifted along the rings 8 at one end side. Thus, inside edges of the loose-leaves are arranged in a superposed state to be deviated to a top side of the rings 8.

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(71) 出願人 591071975

井沢工業株式会社

群馬県高崎市江木町966-2

(72) 発明者 井澤清

群馬県高崎市江木町966-2 井沢工業株
式会社内

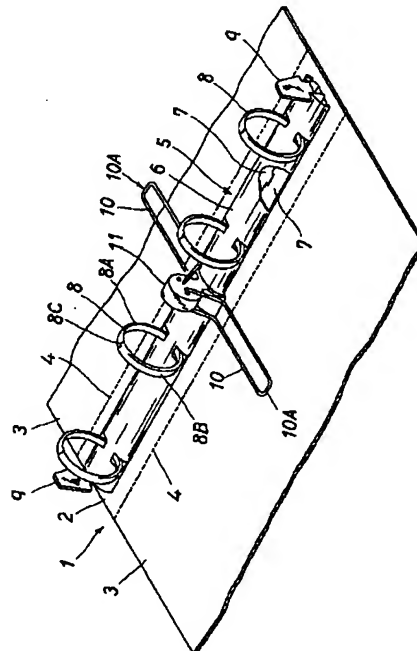
(74) 代理人 弁理士 羽島 亘

(54) 【発明の名称】 リングファイル及びリングファイルに用いるルーズリーフの整形ガイド

(57) 【要約】

【目的】 リングファイルの表紙を閉じたとき、ルーズリーフを表紙の背部上で重合状態に整えられるようにする。

【構成】 表紙1の背部2にファイル綴具5を固設したリングファイルにして、ファイル綴具5のベースを成す本体枠6に、一対の開閉翼10とその保持具11で構成した整形ガイドが装着される。開閉翼10は、リング8より内側となる位置で一端を保持具11に枢着し、それぞれ両側に開放した状態にして、各々その自由端10Aが表紙1の背部2を越えて両側面部3まで達する。そして、開閉翼10の相互間でリング8にルーズリーフが綴じられる。表紙1を閉じるとき、これに連れて開閉翼10も相互に閉じ方向に向かい、その一端側でルーズリーフの内側縁をリング8に沿って押し上げる。このため、ルーズリーフの内側縁がリング8の頂部側に寄って重合状態に整えられる。



【特許請求の範囲】

【請求項1】 折線を形成した表紙の内側で該表紙の背部に、半割のリングを有するファイル綴具を固設したリングファイルにおいて、前記ファイル綴具のベースを成す本体枠の長手方向で前記リングより内側となる位置に支点をもってリングの周方向に揺動する一対の開閉翼を備え、それら開閉翼は前記表紙の展開時に該表紙の両側に広げた状態にして、各々その自由端が前記背部の両縁を成す折線を越えて延びるようにしたことを特徴とするリングファイル。

【請求項2】 折線を形成した表紙の内側で該表紙の背部に、半割のリングを有するファイル綴具を固設したリングファイルにして、前記表紙の閉時にルーズリーフの内側縁を前記リングの頂部側に寄せる整形ガイドであって、前記ファイル綴具のベースを成す本体枠または背部の内面に取り付けられる保持具と、この保持具に揺動可能にして設けた一対の開閉翼で成り、このうち前記保持具は前記開閉翼の各々一端を支持する支持部を有して該支持部が前記本体枠の長手方向で前記リングより内側となる位置に固定され、前記開閉翼は各々その一端が前記支持部の部位で支持されて前記保持具の取付時に前記リングの周方向に揺動するとともに前記表紙の展開時に該表紙の両側に広げた状態にして各々その自由端が前記背部の両縁を成す折線を越えて延びるようにしたことを特徴とするリングファイルに用いるルーズリーフの整形ガイド。

【請求項3】 折線を形成した表紙の内側で該表紙の背部に、半割のリングを有するファイル綴具を固設したリングファイルにして、前記表紙の閉時にルーズリーフの内側縁を前記リングの頂部側に寄せる整形ガイドであって、前記ファイル綴具のベースを成す本体枠に取り付けられる保持具と、この保持具に揺動可能にして設けた一対の開閉翼で成り、このうち前記保持具は前記本体枠に弾力をもって嵌着する取付部と前記開閉翼の各々一端を支持する支持部を有して該支持部が前記本体枠の長手方向で前記リングより内側となる位置に固定され、また前記開閉翼は各々その一端が前記支持部の部位で支持されて前記保持具の取付時に前記リングの周方向に揺動するとともに前記表紙の展開時に該表紙の両側に広げた状態にして各々その自由端が前記背部の両縁を成す折線を越えて延びるようにしたことを特徴とするリングファイルに用いるルーズリーフの整形ガイド。

【請求項4】 保持具に、一対の開閉翼の揺動を規制するロック手段を備えた請求項2または請求項3に記載したリングファイルに用いるルーズリーフの整形ガイド。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明はリングファイルに関し、特にルーズリーフの周縁を揃えて綴じれるようにしたリングファイル及びリングファイルに用いるルーズリー

フの整形ガイドに関する。

【0002】

【従来の技術】従来、パンチ穴を穿設して抜き差し自在にしたルーズリーフを綴じ込むファイルブックとして、表紙に半割のリングを有するファイル綴具を固設したリングファイルや、リングに代えて直線状の支柱の用いたパイプファイルが知られる。

【0003】このうち、リングファイルに用いられるファイル綴具は、例えば湾曲する本体枠の中に、その長手方向に沿って一対の作動板を屈曲自在に収容し、その作動板に半割にしたリングの下端をそれぞれ個別に固着して、本体枠の上方に突出するリングの頂部が作動板の屈曲作用により開閉するようにしてある。

【0004】そして、その種のファイル綴具を用いたリングファイルによれば、パイプファイルに比べてルーズリーフの開放状態が良く、しかも所要位置でルーズリーフを抜き差しするとき、その前後のルーズリーフをリングから抜き取る必要がないなどの利点がある。

【0005】

【発明が解決しようとする課題】しかしながら、従来のリングファイルによれば、綴じられたルーズリーフの内側縁が表紙の背部上に位置する関係上、表紙の閉時にルーズリーフの外側縁側だけに表紙による押込力が作用するため、ルーズリーフはその内側縁をリングの下方に残したまま外側縁だけが反転する傾向にある。そして、ルーズリーフはその可撓性により内側縁の付近で大きく湾曲した状態に綴じられて体裁を損なうことになる。

【0006】特に、ルーズリーフの内側縁で、その長手方向一方側がリングに沿って反転しつつも他方側がリングの下方に残存することもある。そして、このときルーズリーフが表紙中で傾いて、図10のようにその一部が表紙1から突出して保管時などにその部分が折れ曲がるなどの欠点を有した。

【0007】一方、図11のようにプラスチックなどの硬質板で成るガイド板GをルーズリーフLと一緒に綴じて、上述のような欠点を解消しようとする試みがある。然るに、その種のガイド板Gは硬質のルーズリーフであるにすぎず、その内側縁が表紙1の閉時にもリング8の下方に残存することになるので、ルーズリーフLの内側縁を表紙1の閉時にリング8の頂部側に寄せるといった目的を達していない。むしろ、そのガイド板Gは硬質であるがため、リング8が通る穴Hの大きさによっては該穴がリング8に咬んで動作不良を生ずる。

【0008】そこで、本発明はリングファイルの表紙を閉じたとき、ルーズリーフを背部上で重合状態に整えて保管できるようにすることを目的とする。

【0009】

【課題を解決するための手段】本発明は上述の目的を達成するため、折線を形成した表紙の内側で該表紙の背部に、半割のリングを有するファイル綴具を固設したリン

グファイルにおいて、前記ファイル綴具のベースを成す本体枠の長手方向で前記リングより内側となる位置に支点をもってリングの周方向に揺動する一対の開閉翼を備え、それら開閉翼は前記表紙の展開時に該表紙の両側に広げた状態にして、各々その自由端が前記背部の両縁を成す折線を越えて延びるようにしたことを特徴とするリングファイルを提供するものである。

【0010】具体的には、折線を形成した表紙の内側で該表紙の背部に、半割のリングを有するファイル綴具を固設したリングファイルにおいて、前記リングの周方向に揺動する相互に開閉可能な一対の開閉翼を有し、それら開閉翼の各々端を支持する支持部を前記ファイル綴具のベースを成す本体枠の長手方向における前記リングより内側となる位置に置き、それら開閉翼が前記背部の両縁を成す前記折線を越えて延びる長さを有しているリングファイルである。

【0011】また、本発明は折線を形成した表紙の内側で該表紙の背部に、半割のリングを有するファイル綴具を固設したリングファイルにして、前記表紙の閉時にルーズリーフの内側縁を前記リングの頂部側に寄せる整形ガイドであって、前記ファイル綴具のベースを成す本体枠または背部の内面に取り付けられる保持具と、この保持具に揺動可能にして設けた一対の開閉翼で成り、このうち前記保持具は前記開閉翼の各々端を支持する支持部を有して該支持部が前記本体枠の長手方向で前記リングより内側となる位置に固定され、前記開閉翼は各々その一端が前記支持部の部位で支持されて前記保持具の取付時に前記リングの周方向に揺動するとともに前記表紙の展開時に該表紙の両側に広げた状態にして各々その自由端が前記背部の両縁を成す折線を越えて延びるようにしたことを特徴とするリングファイルに用いるルーズリーフの整形ガイドを提供するものである。

【0012】その種の整形ガイドは、ねじ又は接着剤などを用いて取り付ける方式にしてもよいが、利便性を上げる意味では簡易に着脱できるようにすることが好ましい。

【0013】そこで、請求項3の発明では、折線を形成した表紙の内側で該表紙の背部に、半割のリングを有するファイル綴具を固設したリングファイルにして、前記表紙の閉時にルーズリーフの内側縁を前記リングの頂部側に寄せる整形ガイドであって、前記ファイル綴具のベースを成す本体枠に取り付けられる保持具と、この保持具に揺動可能にして設けた一対の開閉翼で成り、このうち前記保持具は前記本体枠に弾力をもって嵌着する取付部と前記開閉翼の各々端を支持する支持部を有して該支持部が前記本体枠の長手方向で前記リングより内側となる位置に固定され、また前記開閉翼は各々その一端が前記支持部の部位で支持されて前記保持具の取付時に前記リングの周方向に揺動するとともに前記表紙の展開時に該表紙の両側に広げた状態にして各々その自由端が前

記背部の両縁を成す折線を越えて延びるようにしたことを特徴とするリングファイルに用いるルーズリーフの整形ガイドを提供する。

【0014】なお、上述のような保持具には、請求項4の発明のように一対の開閉翼の揺動を規制するロック手段を備えると良い。

【0015】

【発明の実施の形態】以下、本発明の実施の形態を図面に基いて詳細に説明する。図1は本発明に係るリングファイルの一例を示した斜視図である。同図において、1はプラスチックや厚紙その他の硬質材で成る表紙であり、その中央部は一定幅の背部2として該背部の両側に側面部3、3が形成される。4は背部2と側面部3を区分する折線であり、この折線4は表紙1の中央部に一定の間隔を有して平行に形成される。

【0016】表紙1は折線4の谷折側を内側として、該表紙1の内側で背部2には折線4に沿ってファイル綴具5が固設される。そのファイル綴具5は、扁平な横向きC字形の断面をもつ本体枠6と、この本体枠6の長手方向に沿って該本体枠の内側に屈曲自在に収容した一対の作動板7、7と、本体枠6の長手方向に一定の間隔で配列する開閉自在なリング8、・・と、それらリング8を開閉する操作レバー9、9で構成される。

【0017】一対の作動板7は、各々その内側縁を屈曲自在に係合して外側縁が本体枠6の両側縁内側に圧接させてあり、外力が作用しないときには本体枠6に付与したバネ性で山折または谷折の状態を維持するようにしてある。また、リング8は各々端を一対の作動板7に固着して他端が本体枠6の両側縁に穿設した切欠き10から本体枠6の上方に突出する弧状を成す一対の半割片8A、8Bで形成され、作動板7が山折状態にあってその頂部8Cが開き、作動板7を谷折にして頂部8Cが閉じられる。

【0018】その開閉操作は上述の如く操作レバー9で行われる。この操作レバー9は公知のように本体枠6の長手方向両側にあって作動板7の接合部と部分的に係合しており、そのテコ作用により作動板7を屈曲することができる。但し、操作レバー7を除去した構造にしてリング8を直接手操作で開閉させることもできる。

【0019】ここで、10は例えば鋼線を折曲げて形成した一対の開閉翼であり、それら開閉翼10、10はファイル綴具5のベースを成す本体枠6の長手方向でリング8より内側となる位置にその支点をもってリング8の周方向に揺動し、逆向きに揺動して相互に開閉運動するようにしてある。特に、それら開閉翼10は表紙1の両側に広げた状態にして、各々その自由端10Aが展開された表紙1の背部2を越えて延び、具体的には背部2の両縁を成す折線4を越えて延びて、その折線4を介して背部2に隣接する表紙の両側面部3まで達するようにしてある。また、11は本体枠6に取り付けた保持具であ

り、この保持具11と一対の開閉翼10でルーズリーフの整形ガイドを構成する。

【0020】図2に示すように、保持具11はファイル綴具の本体枠6に取り付けられる取付部12と、この取付部12の上方に一体に形成した円形の支持部13で構成される。このうち、取付部12は本体枠6の上面に沿って湾曲するとともに所定の弾力を付与した鞍形にして、その弾力を以て本体枠6に上面に嵌着される。

【0021】また、支持部13は本体枠6の長手方向でリング8より内側となる位置にあって、本体枠6に取付部12を介して固定される。特に、支持部13にはその中央部で開閉翼10の支点を成す2つの支持孔14を近接して穿ってある。ここで、支持部13の外周とリング8の内面との間にはルーズリーフの内側縁が移動する領域15を残し、後述する如くルーズリーフがその内側縁を支持部13の外周面に接触しながらリング8に沿って反転するようにしている。なお、図2において、16は表紙と本体枠を結合するピンであり、そのピン16で本体枠6は数カ所を固定される。

【0022】次に、図3は整形ガイドを部分的に破断して示す。この図で明らかにするように、開閉翼10は各々その一端10Bを内側に直角にして曲げて支持部13の両側から支持孔14に挿入している。なお、支持孔14を軸として該軸にパイプ状にした回転翼の一端を摺動自在に嵌合するようにしてもよい。ここで、保持具11には開閉翼10の揺動を規制するロック手段として、支持部13の上部側における開閉翼10の軌道上に各開閉翼に対応して突起17が隣接して設けられる。

【0023】なお、開閉翼10は開閉時にその部位が突起17に突き当たるが、閉時には表紙の押込力により一端が支持孔14より僅かに引き出されて突起17を乗り越えることができ、開放時には指先で相応の力を与えて突起17を乗り越えさせることができる。

【0024】そして、このように構成されるリングファイルによれば、種々の書類を綴じて保管することができる。書類は側縁に沿って所定の間隔にパンチ穴を穿設したルーズリーフであり、このルーズリーフは公知の如くパンチ穴にリング8を通して綴じられる。

【0025】図4に示すように、ルーズリーフLを綴じるには先ず表紙1を展開し、次いでリング8の頂部を開放して図示せぬパンチ穴にリング8を差し通すのであり、このとき一対の開閉翼10は表紙1に沿ってその両側に広げられる。そして、リング8を閉じ且つ表紙1を閉じてルーズリーフLを書棚などに保管することができる。

【0026】ここで、図4の状態にして表紙1を閉じると、その両側面部3で開閉翼10が圧されて該開閉翼も相互に表紙1の両側面部3に連れて閉塞方向に向かう。このとき、ルーズリーフLは、その内側縁Laが開閉翼の一端10B側で押し上げられ、且つ外側縁Lb側が開

閉翼の他端すなわち自由端10Aで押し上げられるため、リング8に沿って円滑に移動することができる。なお、このときルーズリーフの内側縁Laは支持部13の外周面に接触しながら円形の軌跡を描いて移動する。

【0027】そして、表紙1が閉じられたときには、図5のようにその両側面部3に沿って一対の開閉翼10も閉じてルーズリーフLを両側から押さえ込むようになる。特に、開閉翼10は背部2上で相互に自由端10Aを近接した状態にして、その開放を突起17により規制されるから、ファイル保管時に表紙1が開いてもルーズリーフLの開放を防止できる。

【0028】また、図5で明らかなように、表紙1の閉時にあってルーズリーフLはその内側縁Laが開閉翼10にてリング8の頂部側に寄せられるから、重合状態に整えられて一部が表紙1から突出することがなくなり体裁も良い。

【0029】以上、本発明の好適な一例を説明したが、保持具11を着脱式でなく接着剤などにて本体枠6に固定してもよい。また、図1では保持具11を本体枠6の中央部に取り付けているが、これを本体枠6の長手方向における一端か両端の何れに取り付けるようにしても差し支えない。特に、保持具11の取付位置は支持部13が本体枠6の長手方向でリング8より内側になる位置であればよく、本体枠6に取り付けられる構成に限定されない。例えば、図6のようにファイル綴具5が表紙1の背部2よりやや短いリングファイルでは、図7のように取付部12を平面状にした保持具11にして、該保持具11をその支持部13がリング8より内側となる位置で背部2の一端または両端に取り付けることができる。

【0030】一方、それら保持具11と開閉翼10を単体の整形ガイドとして構成するのではなく、図8、図9のように、本体枠6の上面にリング8より低い取付部たる突片22を対向して設け、その突片22に支持部たる支軸23をリング8より内側になる位置で本体枠6に沿って架設し、この支軸23に一対の開閉翼10の各々一端を環状にして枢着する構成もある。なお、その支持軸23を回転自在な回転軸にして平行に架設し、その回転軸に開閉翼の各々一端を個別に固着してもよい。

【0031】

【発明の効果】以上の説明で明らかなように、本発明によれば表紙の背部上でリングの周方向に揺動する開閉翼の支点をリングより内側の位置に置き、それら自由端が展開する表紙の背部を越えてその両側に延びるようにしたため、ルーズリーフに連れて一対の開閉翼も閉じられる。そして、開閉翼の相互間でルーズリーフを綴じて表紙の閉時に開閉翼にてルーズリーフの内側縁をリングの頂部側に寄せることができる。このため、ルーズリーフがリングの頂部で重合状態に整えられるから、その一部が表紙から突出せず体裁を損ねない。

【0032】また、開閉翼を保持具に揺動自在に設けて

着脱自在な整形ガイドとして構成しているからリングファイルの生産工程を変更する必要がなく、しかも既存のリングファイルに装着してその利便性を向上できる。

【0033】更に、一対の開閉翼を閉じた状態で相互の揺動を規制できるようにしているから、保管時に表紙が開いても綴じ込んだルーズリーフを開閉翼で押さえて適正状態に維持できる。

【図面の簡単な説明】

【図1】本発明に係るリングファイルを部分的に破断して示した斜視図

【図2】同リングファイルの要部を拡大して示した部分断面図

【図3】本願のリングファイルに用いる整形ガイドを部分的に破断して示した斜視図

【図4】表紙を展開してルーズリーフをファイル綴具に綴じた状態を示す正面図

【図5】表紙の閉時におけるルーズリーフの状態を示した正面図

【図6】本発明の他の実施形態を示したリングファイルの展開図

【図7】図6のリングファイルに取り付けた整形ガイド*

*の保持具を示した正面概略図

【図8】本発明の他の実施形態としてファイル綴具を示した側面図

【図9】図8の一部を拡大して示した平面図

【図10】従来のリングファイルでルーズリーフを綴じた状態を示す斜視図

【図11】従来のリングファイルの展開図

【符号の説明】

L ルーズリーフ

10 1 表紙

2 背部

3 側面部

4 折線

5 ファイル綴具

6 本体枠

8 リング

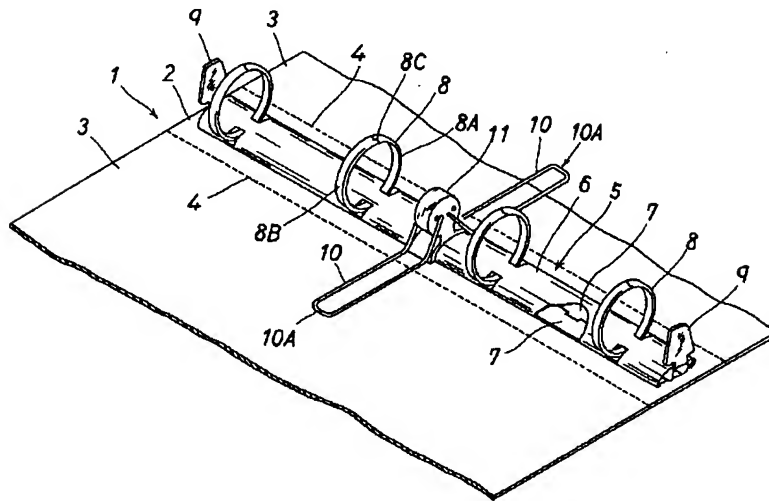
10 開閉翼

11 保持具

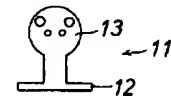
12 取付部

20 13 支持部

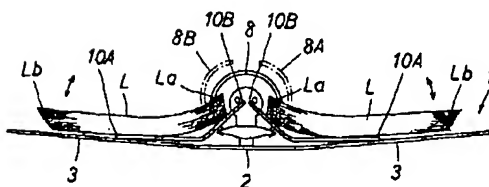
【図1】



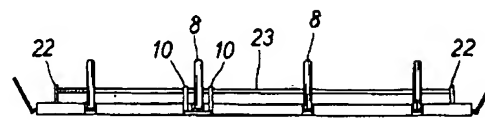
【図7】



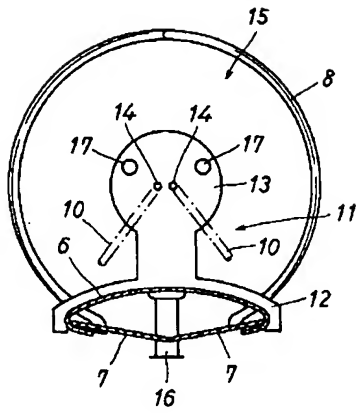
【図4】



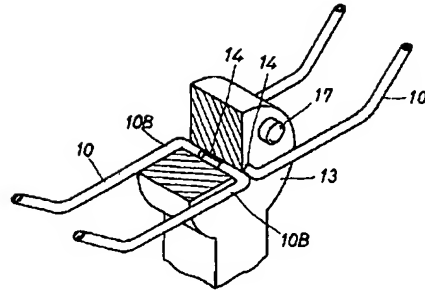
【図8】



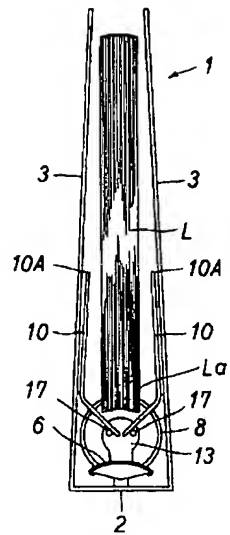
【図2】



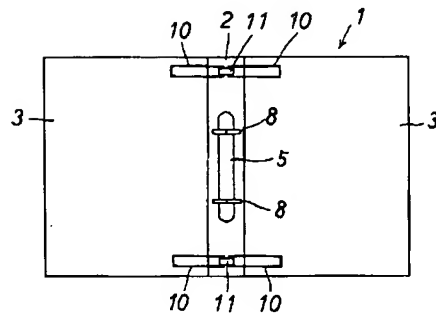
【図3】



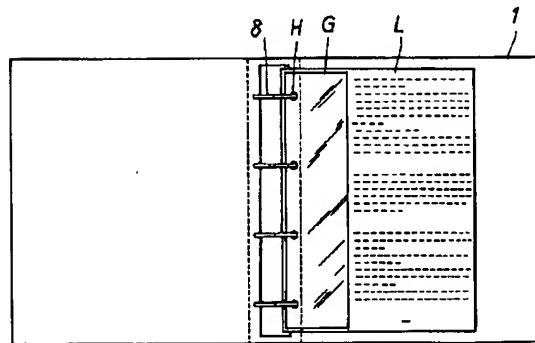
【図5】



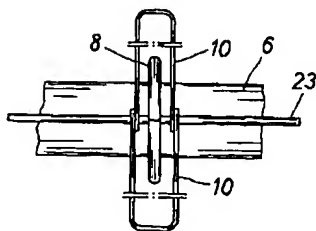
【図6】



【図11】



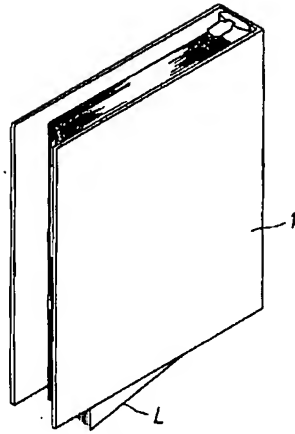
【図9】



(7)

特開平10-337988

【図10】



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TECHNICAL FIELD

[Field of the Invention] Especially this invention relates to the plastic surgery guide of the loose-leaf notebook used for the ring file and ring file arrange the periphery of a loose-leaf notebook and it enabled it to file about a ring file.

[Translation done.]

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PRIOR ART

[Description of the Prior Art] The ring file which fixed at the cover the file ** implement which has a half-segmented ring, and the pipe file which replaced with the ring and the straight-line-like stanchion used are known as a file which files the loose-leaf notebook whose extraction and insertion drilled the punch hole conventionally and was enabled.

[0003] Among these, the file ** implement used for a ring file holds the actuation plate of a couple free [crookedness] along with the longitudinal direction into the body frame which curves, for example, fixes the soffit of the ring used as the actuation plate half-segmented according to an individual, respectively, and the crowning of the ring which projects above a body frame is opened and closed according to a crookedness operation of an actuation plate.

[0004] And according to the ring file using the kind of file ** implement, when the open condition of a loose-leaf notebook is good and a loose-leaf notebook is moreover taken out compared with a pipe file and inserted in a necessary location, there is an advantage of it not being necessary to sample the loose-leaf notebook before and behind that from a ring etc.

[Translation done.]

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] However, according to the conventional ring file, on the relation in which the ulnar margin of the filed loose-leaf notebook is located on the regions of back of a cover, in order that the pushing force with a cover may act only on the outside veranda of a loose-leaf notebook at the time of close [of a cover], a loose-leaf notebook is in the inclination which only the radial border reverses while the ring had left the ulnar margin caudad. And a loose-leaf notebook will be filed by the condition of having curved greatly near the ulnar margin by the flexibility, and will spoil appearance.

[0006] Although the longitudinal direction one side is reversed along with a ring by the ulnar margin of a loose-leaf notebook especially, the other side may remain under the ring. And the loose-leaf notebook inclined in the cover at this time, and that part projected from the cover 1 like drawing 10 , and it had a fault, like that part bends at the time of storage etc.

[0007] Guide plate G which changes with hard plates, such as plastics, like drawing 11 on the other hand is filed together with a loose-leaf notebook L, and the attempt which is going to cancel the above faults occurs. being appropriate -- alike -- the kind of guide plate G -- a hard loose-leaf notebook -- it is -- since it will not pass but the ulnar margin will remain under the ring 8 also at the time of close [of a cover 1], the object of bringing near the ulnar margin of a loose-leaf notebook L by the crowning side of a ring 8 at the time of close [of a cover 1] has not been attained. Rather, depending on the magnitude of the hole H where eye backlash which is hard, and a ring 8 pass along the guide plate G, this hole produces a malfunction in **** to a ring 8.

[0008] Then, this invention aims at preparing a loose-leaf notebook in the polymerization condition, and enabling it to keep it on regions of back, when the cover of a ring file is closed.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] Especially this invention relates to the plastic surgery guide of the loose-leaf notebook used for the ring file and ring file arrange the periphery of a loose-leaf notebook and it enabled it to file about a ring file.

[0002]

[Description of the Prior Art] The ring file which fixed at the cover the file ** implement which has a half-segmented ring, and the pipe file which replaced with the ring and the straight-line-like stanchion used are known as a file which files the loose-leaf notebook whose extraction and insertion drilled the punch hole conventionally and was enabled.

[0003] Among these, the file ** implement used for a ring file holds the actuation plate of a couple free [crookedness] along with the longitudinal direction into the body frame which curves, for example, fixes the soffit of the ring used as the actuation plate half-segmented according to an individual, respectively, and the crowning of the ring which projects above a body frame is opened and closed according to a crookedness operation of an actuation plate.

[0004] And according to the ring file using the kind of file ** implement, when the open condition of a loose-leaf notebook is good and a loose-leaf notebook is moreover taken out compared with a pipe file and inserted in a necessary location, there is an advantage of it not being necessary to sample the loose-leaf notebook before and behind that from a ring etc.

[0005]

[Problem(s) to be Solved by the Invention] However, according to the conventional ring file, on the relation in which the ulnar margin of the filed loose-leaf notebook is located on the regions of back of a cover, in order that the pushing force with a cover may act only on the outside veranda of a loose-leaf notebook at the time of close [of a cover], a loose-leaf notebook is in the inclination which only the radial border reverses while the ring had left the ulnar margin caudad. And a loose-leaf notebook will be filed by the condition of having curved greatly near the ulnar margin by the flexibility, and will spoil appearance.

[0006] Although the longitudinal direction one side is reversed along with a ring by the ulnar margin of a loose-leaf notebook especially, the other side may remain under the ring. And the loose-leaf notebook inclined in the cover at this time, and that part projected from the cover 1 like drawing 10 , and it had a fault, like that part bends at the time of storage etc.

[0007] Guide plate G which changes with hard plates, such as plastics, like drawing 11 on the other hand is filed together with a loose-leaf notebook L, and the attempt which is going to cancel the above faults occurs. being appropriate -- alike -- the kind of guide plate G -- a hard loose-leaf notebook -- it is -- since it will not pass but the ulnar margin will remain under the ring 8 also at the time of close [of a cover 1], the object of bringing near the ulnar margin of a loose-leaf notebook L by the crowning side of a ring 8 at the time of close [of a cover 1] has not been attained. Rather, depending on the magnitude of the hole H where eye backlash which is hard, and a ring 8 pass along the guide plate G, this hole produces a malfunction in **** to a ring 8.

[0008] Then, this invention aims at preparing a loose-leaf notebook in the polymerization condition, and enabling it to keep it on regions of back, when the cover of a ring file is closed.

[0009]

[Means for Solving the Problem] In the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed in order that this invention might

attain the above-mentioned object Have the closing motion aerofoil of the couple rocked with the supporting point in the hoop direction of a ring in the location used as the inside [ring / said] by the longitudinal direction of a body frame which accomplishes the base of said file ** implement, and these closing motion aerofoil is changed into the condition of having extended on both sides of this cover at the time of expansion of said cover. The ring file characterized by making it the free end extend exceeding the broken line which accomplishes said both edges in back respectively is offered.

[0010] In the ring file which specifically fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed It has the closing motion aerofoil of the couple which can be opened and closed to mutual [which is rocked to the hoop direction of said ring]. The supporter of these closing motion aerofoil which supports an end respectively is put on the location used as the inside [ring / in the longitudinal direction of a body frame which accomplishes the base of said file ** implement / said], and these closing motion aerofoil is the ring file which has the die length prolonged exceeding said broken line which accomplishes said both edges in back.

[0011] Moreover, this invention is made the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed. The holder attached in the body frame or the inner surface in back which is the plastic surgery guide which brings near the ulnar margin of a loose-leaf notebook by the crowning side of said ring at the time of close [of said cover], and accomplishes the base of said file ** implement, Change with the closing motion aerofoils of the couple which made rockable and was prepared in this holder, among these said holder is fixed to the location where it has the supporter of said closing motion aerofoil which supports an end respectively, and this supporter serves as the inside [ring / said] by the longitudinal direction of said body frame. While said closing motion aerofoil is supported by the part of said supporter and the end rocks it to the hoop direction of said ring respectively at the time of mounting of said holder The plastic surgery guide of the loose-leaf notebook used for the ring file characterized by making it extend exceeding the broken line on which it changes into the condition of having extended on both sides of this cover at the time of expansion of said cover, and the free end accomplishes said both edges in back respectively is offered.

[0012] Although the kind of plastic surgery guide may be made into the method attached using a screw thread or adhesives, it is desirable to enable it to detach and attach simply in the semantics which raises convenience.

[0013] So, by invention of claim 3, it is made the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed. The holder attached in the body frame which is the plastic surgery guide which brings near the ulnar margin of a loose-leaf notebook by the crowning side of said ring at the time of close [of said cover], and accomplishes the base of said file ** implement, It is fixed to the location where it changes with the closing motion aerofoils of the couple which made rockable and was prepared in this holder, among these said holder has the mounting section attached in said body frame with elasticity, and the supporter of said closing motion aerofoil which supports an end respectively, and this supporter serves as the inside [ring / said] by the longitudinal direction of said body frame. Moreover, while said closing motion aerofoil is supported by the part of said supporter and the end rocks it to the hoop direction of said ring respectively at the time of mounting of said holder The plastic surgery guide of the loose-leaf notebook used for the ring file characterized by making it extend exceeding the broken line on which it changes into the condition of having extended on both sides of this cover at the time of expansion of said cover, and the free end accomplishes said both edges in back respectively is offered.

[0014] In addition, it is good for the above holders to have a lock means to regulate the splash of the closing motion aerofoil of a couple like invention of claim 4.

[0015]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained to a detail based on a drawing. Drawing 1 is the perspective view having shown an example of the ring file concerning this invention. the cover with which 1 changes by the hard material of plastics, or cardboard and others in this drawing -- it is -- the center section -- the regions of back of constant width -- lateral portions 3 and 3 are formed in these both sides in back as 2. 4 -- regions of back -- it is the broken line which classifies 2 and the both-sides surface part 3, and this broken line 4 has fixed spacing in the center section of the cover 1, and is formed in parallel.

[0016] a cover 1 -- the valley fold side of a broken line 4 -- the inside -- carrying out -- the inside of this cover 1 -- regions of back -- the file ** implement 5 is fixed to 2 along with a broken line 4. That file ** implement 5 consists of

control levers 9 and 9 which open and close the body frame 6 with the cross section of a flat sideways C typeface, the actuation plates 7 and 7 of a couple held free [crookedness] inside this body frame along with the longitudinal direction of this body frame 6, the ring 8 which can be opened and closed, and which is arranged at fixed spacing to the longitudinal direction of the body frame 6 and .., and these rings 8.

[0017] Respectively, it is engaged free [crookedness] and the radial border has carried out the pressure welding of the ulnar margin inside [edges-on-both-sides] the body frame 6, and the actuation plate 7 of a couple has maintained the condition of mountain fold or a valley fold by the spring nature given to the body frame 6, when external force does not act. Moreover, a ring 8 is formed by the half-segmented pieces 8A and 8B of the couple which accomplishes the arc which projects above the body frame 6 from the notch 10 which fixed the end to the actuation plate 7 of a couple respectively, and the other end drilled in the edges on both sides of the body frame 6, the actuation plate 7 is in a mountain fold condition, the top 8C makes an aperture and the actuation plate 7 a valley fold, and top 8C is closed.

[0018] The switching operation is performed by the control lever 9 like ****. This control lever 9 is in the longitudinal direction both sides of the body frame 6, is engaging with the joint of the actuation plate 7 selectively so that it may be well-known, and it can be crooked in the actuation plate 7 by that leverage. However, it can be made the structure which removed the control lever 7, and a ring 8 can also be made to open and close by direct manual operation.

[0019] It is the closing motion aerofoil of the couple which bent and formed steel wire, and 10 rocks these closing motion aerofoils 10 and 10 with the supporting point in the hoop direction of a ring 8 in the location which serves as the inside [ring / 8] by the longitudinal direction of the body frame 6 which accomplishes the base of the file ** implement 5, is rocked to the reverse sense, and it has been made to carry out the opening and closing movement mutually here. the regions of back of the cover 1 with which especially these closing motion aerofoil 10 was changed into the condition of having extended on both sides of a cover 1, and the free-end 10A was developed respectively -- 2 - - exceeding -- extending -- concrete -- regions of back -- the broken line 4 which accomplishes both the edges of 2 -- exceeding -- extending -- the broken line 4 -- minding -- regions of back -- it is made to have reached to the both-sides surface part 3 of the cover which adjoins 2 Moreover, 11 is the holder attached in the body frame 6, and constitutes the plastic surgery guide of a loose-leaf notebook from a closing motion aerofoil 10 of this holder 11 and a couple.

[0020] As shown in drawing 2 , a holder 11 consists of the mounting section 12 attached in the body frame 6 of a file ** implement, and a circular supporter 13 formed above this mounting section 12 at one. among these, the saddle shape which gave predetermined elasticity while the mounting section 12 curved along the top face of the body frame 6 -- carrying out -- the elasticity -- with, the body frame 6 is attached on the top face.

[0021] Moreover, a supporter 13 is in the location which serves as the inside [ring / 8] by the longitudinal direction of the body frame 6, and is fixed to the body frame 6 through the mounting section 12. Especially, to the supporter 13, two support holes 14 which accomplish the supporting point of the closing motion aerofoil 10 are approached and dug in the center section. He is trying for a loose-leaf notebook to reverse the ulnar margin along with a ring 8 here so that the field 15 where the ulnar margin of a loose-leaf notebook moves between the periphery of a supporter 13 and the inner surface of a ring 8 may be left and mentioned later, contacting the peripheral face of a supporter 13. In addition, 16 is a pin which combines a cover and a body frame, and the body frame 6 has several places fixed by the pin 16 in drawing 2 .

[0022] Next, drawing 3 fractures a plastic surgery guide selectively, and shows it. The closing motion aerofoil 10 bends by carrying out that end 10B at a right angle inside respectively, and is inserting it in the support hole 14 from the both sides of a supporter 13 so that it may clarify in this drawing. In addition, you may make it fit in the end of the rotary wing used as this shaft centering on the support hole 14 at the shape of a pipe, enabling free sliding. Here, corresponding to each closing motion aerofoil, projection 17 is adjoined and formed as a lock means to regulate the splash of the closing motion aerofoil 10 at a holder 11, on the orbit of the closing motion aerofoil 10 by the side of the upper part of a supporter 13.

[0023] In addition, although the part runs against projection 17 at the time of closing motion, at the time of close, an end can be pulled out more slightly than the support hole 14 by the pushing force of a cover, and the closing motion aerofoil 10 can overcome projection 17, can give the suitable force by the fingertip at the time of disconnection, and can make projection 17 overcome.

[0024] And according to the ring file constituted in this way, various documents can be filed and kept. A document is the loose-leaf notebook which drilled the punch hole in predetermined spacing along with the side edge, and this loose-leaf notebook is filed through a ring 8 in a punch hole so that it may be well-known.

[0025] As shown in drawing 4 , for filing a loose-leaf notebook L, a cover 1 is developed first, putting a ring 8 in the punch hole which subsequently does not open and illustrate the crowning of a ring 8 is kept, and the closing motion aerofoil 10 of a couple can be extended on those both sides along with a cover 1 at this time. And closing and a cover 1 can be closed for a ring 8, and a loose-leaf notebook L can be kept on a bookshelf etc.

[0026] Here, if it changes into the condition of drawing 4 and a cover 1 is closed, the closing motion aerofoil 10 will be pressed in the both-sides surface part 3, this closing motion aerofoil will also be mutually taken to the both-sides surface part 3 of a cover 1, and it will go in the lock out direction. Since that ulnar margin La is pushed up by the end 10B side of a closing motion aerofoil at this time and a radial-border Lb side is pushed up by the other end of a closing motion aerofoil, i.e., free-end 10A, a loose-leaf notebook L is smoothly movable along with a ring 8. In addition, at this time, contacting the peripheral face of a supporter 13, a circular locus is drawn and the ulnar margin La of a loose-leaf notebook moves.

[0027] And when a cover 1 is closed, the closing motion aerofoil 10 of a couple is also closed along the both-sides surface part 3 like drawing 5 R> 5, and it comes to hold down a loose-leaf notebook L from both sides. Especially the closing motion aerofoil 10 changes free-end 10A mutually into the condition of having approached, on regions-of-back 2, and since it is regulated by projection 17, even if a cover 1 opens the disconnection at the time of file maintenance, it can prevent disconnection of a loose-leaf notebook L.

[0028] Moreover, it is at the time of close [of a cover 1], and since the ulnar margin La is brought near by the crowning side of a ring 8 with the closing motion aerofoils 10, it is lost that it is prepared by the polymerization condition and a part projects of a loose-leaf notebook L from a cover 1, and it is decent [a loose-leaf notebook], so that clearly [in drawing 5].

[0029] As mentioned above, although a suitable example of this invention was explained, a holder 11 may be fixed to the body frame 6 not with an attachment-and-detachment type but with adhesives etc. Moreover, although the holder 11 is attached in the center section of the body frame 6 in drawing 1 , even if it attaches this in any of the end in the longitudinal direction of the body frame 6, or ends, it does not interfere. Especially the attaching position of a holder 11 is not limited to the configuration attached in the body frame 6 that what is necessary is just the location where a supporter 13 becomes inside a ring 8 by the longitudinal direction of the body frame 6. for example, drawing 6 -- like -- the file ** implement 5 -- the regions of back of a cover 1 -- the location where it is made the holder 11 which made the mounting section 12 the plane like drawing 7 in a little short ring file, and the supporter 13 serves as the inside [ring / 8] from 2 in this holder 11 -- regions of back -- it can attach in the end or ends of 2.

[0030] On the other hand, these holders 11 and the closing motion aerofoil 10 are not constituted as a plastic surgery guide of a simple substance. Like drawing 8 and drawing 9 The mounting section slack protruding piece 22 lower than a ring 8 is countered and formed in the top face of the body frame 6, the supporter slack pivot 23 is constructed over that protruding piece 22 along with the body frame 6 in the location which becomes inside a ring 8, and this pivot 23 also has the configuration of the closing motion aerofoil 10 of a couple which makes an end annular and pivots it respectively. in addition, it may be made the revolving shaft which can rotate the support shaft 23 freely, and may construct over parallel, and the each end of a closing motion aerofoil may be fixed according to an individual to the revolving shaft.

[0031]

[Effect of the Invention] The supporting point of the closing motion aerofoil which is rocked to the hoop direction of a ring on the regions of back of a cover according to [so that clearly] this invention is put on the location inside a ring by the above explanation, since it was made to extend on the both sides across the regions of back of the cover which these free end develops, it takes to a loose-leaf notebook and the closing motion aerofoil of a couple is also closed. And a loose-leaf notebook can be filed between closing motion aerofoils, and the ulnar margin of a loose-leaf notebook can be brought near by the crowning side of a ring with closing motion aerofoils at the time of close [of a cover]. For this reason, since a loose-leaf notebook is prepared by the polymerization condition in the crowning of a ring, that part does not project from a cover and does not spoil appearance.

[0032] Moreover, since a closing motion aerofoil is prepared in a holder free [a splash] and it constitutes as a plastic surgery guide which can be detached and attached freely, it is not necessary to change the production process of a ring file, and moreover the existing ring file is equipped, and the convenience can be improved.

[0033] Furthermore, since it enables it to regulate a splash mutual in the condition of having closed the closing motion aerofoil of a couple, the loose-leaf notebook filed even if the cover opened at the time of storage is pressed down with

closing motion aerofoils, and can be maintained in the proper condition.

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Invention] The supporting point of the closing motion aerofoil which is rocked to the hoop direction of a ring on the regions of back of a cover according to [so that clearly] this invention is put on the location inside a ring by the above explanation, since it was made to extend on the both sides across the regions of back of the cover which these free end develops, it takes to a loose-leaf notebook and the closing motion aerofoil of a couple is also closed. And a loose-leaf notebook can be filed between closing motion aerofoils, and the ulnar margin of a loose-leaf notebook can be brought near by the crowning side of a ring with closing motion aerofoils at the time of close [of a cover]. For this reason, since a loose-leaf notebook is prepared by the polymerization condition in the crowning of a ring, that part does not project from a cover and does not spoil appearance.

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MEANS

[Means for Solving the Problem] In the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed in order that this invention might attain the above-mentioned object Have the closing motion aerofoil of the couple rocked with the supporting point in the hoop direction of a ring in the location used as the inside [ring / said] by the longitudinal direction of a body frame which accomplishes the base of said file ** implement, and these closing motion aerofoil is changed into the condition of having extended on both sides of this cover at the time of expansion of said cover. The ring file characterized by making it the free end extend exceeding the broken line which accomplishes said both edges in back respectively is offered.

[0010] In the ring file which specifically fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed It has the closing motion aerofoil of the couple which can be opened and closed to mutual [which is rocked to the hoop direction of said ring]. The supporter of these closing motion aerofoil which supports an end respectively is put on the location used as the inside [ring / in the longitudinal direction of a body frame which accomplishes the base of said file ** implement / said], and these closing motion aerofoil is the ring file which has the die length prolonged exceeding said broken line which accomplishes said both edges in back.

[0011] Moreover, this invention is made the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed. The holder attached in the body frame or the inner surface in back which is the plastic surgery guide which brings near the ulnar margin of a loose-leaf notebook by the crowning side of said ring at the time of close [of said cover], and accomplishes the base of said file ** implement, Change with the closing motion aerofoils of the couple which made rockable and was prepared in this holder, among these said holder is fixed to the location where it has the supporter of said closing motion aerofoil which supports an end respectively, and this supporter serves as the inside [ring / said] by the longitudinal direction of said body frame. While said closing motion aerofoil is supported by the part of said supporter and the end rocks it to the hoop direction of said ring respectively at the time of mounting of said holder The plastic surgery guide of the loose-leaf notebook used for the ring file characterized by making it extend exceeding the broken line on which it changes into the condition of having extended on both sides of this cover at the time of expansion of said cover, and the free end accomplishes said both edges in back respectively is offered.

[0012] Although the kind of plastic surgery guide may be made into the method attached using a screw thread or adhesives, it is desirable to enable it to detach and attach simply in the semantics which raises convenience.

[0013] So, by invention of claim 3, it is made the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed. The holder attached in the body frame which is the plastic surgery guide which brings near the ulnar margin of a loose-leaf notebook by the crowning side of said ring at the time of close [of said cover], and accomplishes the base of said file ** implement, It is fixed to the location where it changes with the closing motion aerofoils of the couple which made rockable and was prepared in this holder, among these said holder has the mounting section attached in said body frame with elasticity, and the supporter of said closing motion aerofoil which supports an end respectively, and this supporter serves as the inside [ring / said] by the longitudinal direction of said body frame. Moreover, while said closing motion aerofoil is supported by the part of said supporter and the end rocks it to the hoop direction of said ring respectively at the time of mounting of said holder The plastic surgery guide of the loose-leaf notebook used for the ring file characterized by

making it extend exceeding the broken line on which it changes into the condition of having extended on both sides of this cover at the time of expansion of said cover, and the free end accomplishes said both edges in back respectively is offered.

[0014] In addition, it is good for the above holders to have a lock means to regulate the splash of the closing motion aerofoil of a couple like invention of claim 4.

[0015]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained to a detail based on a drawing. Drawing 1 is the perspective view having shown an example of the ring file concerning this invention. the cover with which 1 changes by the hard material of plastics, or cardboard and others in this drawing -- it is -- the center section -- the regions of back of constant width -- lateral portions 3 and 3 are formed in these both sides in back as 2. 4 -- regions of back -- it is the broken line which classifies 2 and the both-sides surface part 3, and this broken line 4 has fixed spacing in the center section of the cover 1, and is formed in parallel.

[0016] a cover 1 -- the valley fold side of a broken line 4 -- the inside -- carrying out -- the inside of this cover 1 -- regions of back -- the file ** implement 5 is fixed to 2 along with a broken line 4. That file ** implement 5 consists of control levers 9 and 9 which open and close the body frame 6 with the cross section of a flat sideways C typeface, the actuation plates 7 and 7 of a couple held free [crookedness] inside this body frame along with the longitudinal direction of this body frame 6, the ring 8 which can be opened and closed, and which is arranged at fixed spacing to the longitudinal direction of the body frame 6 and .., and these rings 8.

[0017] Respectively, it is engaged free [crookedness] and the radial border has carried out the pressure welding of the ulnar margin inside [edges-on-both-sides] the body frame 6, and the actuation plate 7 of a couple has maintained the condition of mountain fold or a valley fold by the spring nature given to the body frame 6, when external force does not act. Moreover, a ring 8 is formed by the half-segmented pieces 8A and 8B of the couple which accomplishes the arc which projects above the body frame 6 from the notch 10 which fixed the end to the actuation plate 7 of a couple respectively, and the other end drilled in the edges on both sides of the body frame 6, the actuation plate 7 is in a mountain fold condition, the top 8C makes an aperture and the actuation plate 7 a valley fold, and top 8C is closed.

[0018] The switching operation is performed by the control lever 9 like ****. This control lever 9 is in the longitudinal direction both sides of the body frame 6, is engaging with the joint of the actuation plate 7 selectively so that it may be well-known, and it can be crooked in the actuation plate 7 by that leverage. However, it can be made the structure which removed the control lever 7, and a ring 8 can also be made to open and close by direct manual operation.

[0019] It is the closing motion aerofoil of the couple which bent and formed steel wire, and 10 rocks these closing motion aerofoils 10 and 10 with the supporting point in the hoop direction of a ring 8 in the location which serves as the inside [ring / 8] by the longitudinal direction of the body frame 6 which accomplishes the base of the file ** implement 5, is rocked to the reverse sense, and it has been made to carry out the opening and closing movement mutually here. the regions of back of the cover 1 with which especially these closing motion aerofoil 10 was changed into the condition of having extended on both sides of a cover 1, and the free-end 10A was developed respectively -- 2 - - exceeding -- extending -- concrete -- regions of back -- the broken line 4 which accomplishes both the edges of 2 -- exceeding -- extending -- the broken line 4 -- minding -- regions of back -- it is made to have reached to the both-sides surface part 3 of the cover which adjoins 2 Moreover, 11 is the holder attached in the body frame 6, and constitutes the plastic surgery guide of a loose-leaf notebook from a closing motion aerofoil 10 of this holder 11 and a couple.

[0020] As shown in drawing 2 , a holder 11 consists of the mounting section 12 attached in the body frame 6 of a file ** implement, and a circular supporter 13 formed above this mounting section 12 at one. among these, the saddle shape which gave predetermined elasticity while the mounting section 12 curved along the top face of the body frame 6 -- carrying out -- the elasticity -- with, the body frame 6 is attached on the top face.

[0021] Moreover, a supporter 13 is in the location which serves as the inside [ring / 8] by the longitudinal direction of the body frame 6, and is fixed to the body frame 6 through the mounting section 12. Especially, to the supporter 13, two support holes 14 which accomplish the supporting point of the closing motion aerofoil 10 are approached and dug in the center section. He is trying for a loose-leaf notebook to reverse the ulnar margin along with a ring 8 here so that the field 15 where the ulnar margin of a loose-leaf notebook moves between the periphery of a supporter 13 and the inner surface of a ring 8 may be left and mentioned later, contacting the peripheral face of a supporter 13. In addition, 16 is a pin which combines a cover and a body frame, and the body frame 6 has several places fixed by the pin 16 in drawing 2 .

[0022] Next, drawing 3 fractures a plastic surgery guide selectively, and shows it. The closing motion aerofoil 10 bends by carrying out that end 10B at a right angle inside respectively, and is inserting it in the support hole 14 from the both sides of a supporter 13 so that it may clarify in this drawing. In addition, you may make it fit in the end of the rotary wing used as this shaft centering on the support hole 14 at the shape of a pipe, enabling free sliding. Here, corresponding to each closing motion aerofoil, projection 17 is adjoined and formed as a lock means to regulate the splash of the closing motion aerofoil 10 at a holder 11, on the orbit of the closing motion aerofoil 10 by the side of the upper part of a supporter 13.

[0023] In addition, although the part runs against projection 17 at the time of closing motion, at the time of close, an end can be pulled out more slightly than the support hole 14 by the pushing force of a cover, and the closing motion aerofoil 10 can overcome projection 17, can give the suitable force by the fingertip at the time of disconnection, and can make projection 17 overcome.

[0024] And according to the ring file constituted in this way, various documents can be filed and kept. A document is the loose-leaf notebook which drilled the punch hole in predetermined spacing along with the side edge, and this loose-leaf notebook is filed through a ring 8 in a punch hole so that it may be well-known.

[0025] As shown in drawing 4, for filing a loose-leaf notebook L, a cover 1 is developed first, putting a ring 8 in the punch hole which subsequently does not open and illustrate the crowning of a ring 8 is kept, and the closing motion aerofoil 10 of a couple can be extended on those both sides along with a cover 1 at this time. And closing and a cover 1 can be closed for a ring 8, and a loose-leaf notebook L can be kept on a bookshelf etc.

[0026] Here, if it changes into the condition of drawing 4 and a cover 1 is closed, the closing motion aerofoil 10 will be pressed in the both-sides surface part 3, this closing motion aerofoil will also be mutually taken to the both-sides surface part 3 of a cover 1, and it will go in the lock out direction. Since that ulnar margin La is pushed up by the end 10B side of a closing motion aerofoil at this time and a radial-border Lb side is pushed up by the other end of a closing motion aerofoil, i.e., free-end 10A, a loose-leaf notebook L is smoothly movable along with a ring 8. In addition, at this time, contacting the peripheral face of a supporter 13, a circular locus is drawn and the ulnar margin La of a loose-leaf notebook moves.

[0027] And when a cover 1 is closed, the closing motion aerofoil 10 of a couple is also closed along the both-sides surface part 3 like drawing 5 R> 5, and it comes to hold down a loose-leaf notebook L from both sides. Especially the closing motion aerofoil 10 changes free-end 10A mutually into the condition of having approached, on regions-of-back 2, and since it is regulated by projection 17, even if a cover 1 opens the disconnection at the time of file maintenance, it can prevent disconnection of a loose-leaf notebook L.

[0028] Moreover, it is at the time of close [of a cover 1], and since the ulnar margin La is brought near by the crowning side of a ring 8 with the closing motion aerofoils 10, it is lost that it is prepared by the polymerization condition and a part projects of a loose-leaf notebook L from a cover 1, and it is decent [a loose-leaf notebook], so that clearly [in drawing 5].

[0029] As mentioned above, although a suitable example of this invention was explained, a holder 11 may be fixed to the body frame 6 not with an attachment-and-detachment type but with adhesives etc. Moreover, although the holder 11 is attached in the center section of the body frame 6 in drawing 1, even if it attaches this in any of the end in the longitudinal direction of the body frame 6, or ends, it does not interfere. Especially the attaching position of a holder 11 is not limited to the configuration attached in the body frame 6 that what is necessary is just the location where a supporter 13 becomes inside a ring 8 by the longitudinal direction of the body frame 6. for example, drawing 6 -- like -- the file ** implement 5 -- the regions of back of a cover 1 -- the location where it is made the holder 11 which made the mounting section 12 the plane like drawing 7 in a little short ring file, and the supporter 13 serves as the inside [ring / 8] from 2 in this holder 11 -- regions of back -- it can attach in the end or ends of 2.

[0030] On the other hand, these holders 11 and the closing motion aerofoil 10 are not constituted as a plastic surgery guide of a simple substance. Like drawing 8 and drawing 9 The mounting section slack protruding piece 22 lower than a ring 8 is countered and formed in the top face of the body frame 6, the supporter slack pivot 23 is constructed over that protruding piece 22 along with the body frame 6 in the location which becomes inside a ring 8, and this pivot 23 also has the configuration of the closing motion aerofoil 10 of a couple which makes an end annular and pivots it respectively. in addition, it may be made the revolving shaft which can rotate the support shaft 23 freely, and may construct over parallel, and the each end of a closing motion aerofoil may be fixed according to an individual to the revolving shaft.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The perspective view in which having fractured the ring file concerning this invention selectively, and having shown it

[Drawing 2] The fragmentary sectional view having expanded and shown the important section of this ring file

[Drawing 3] The perspective view in which having fractured selectively the plastic surgery guide used for the ring file of this application, and having shown it

[Drawing 4] The front view showing the condition of having developed the cover and having filed the loose-leaf notebook to the file ** implement

[Drawing 5] The front view having shown the condition of the loose-leaf notebook at the time of close [of a cover]

[Drawing 6] The development view of a ring file having shown other operation gestalten of this invention

[Drawing 7] The transverse-plane schematic diagram having shown the holder of the plastic surgery guide attached in the ring file of drawing 6

[Drawing 8] The side elevation having shown the file ** implement as other operation gestalten of this invention

[Drawing 9] The top view having expanded and shown a part of drawing 8

[Drawing 10] The perspective view showing the condition of having filed the loose-leaf notebook by the conventional ring file

[Drawing 11] The development view of the conventional ring file

[Description of Notations]

L Loose-leaf notebook

1 Cover

2 Regions of Back

3 Lateral Portion

4 Broken Line

5 File ** Implement

6 Body Frame

8 Ring

10 Closing Motion Aerofoil

11 Holder

12 Mounting Section

13 Supporter

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CLAIMS

[Claim(s)]

[Claim 1] In the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed Have the closing motion aerofoil of the couple rocked with the supporting point in the hoop direction of a ring in the location used as the inside [ring / said] by the longitudinal direction of a body frame which accomplishes the base of said file ** implement, and these closing motion aerofoil is changed into the condition of having extended on both sides of this cover at the time of expansion of said cover. The ring file characterized by making it the free end extend exceeding the broken line which accomplishes said both edges in back respectively.

[Claim 2] It is made the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed. The holder attached in the body frame or the inner surface in back which is the plastic surgery guide which brings near the ulnar margin of a loose-leaf notebook by the crowning side of said ring at the time of close [of said cover], and accomplishes the base of said file ** implement, Change with the closing motion aerofoils of the couple which made rockable and was prepared in this holder, among these said holder is fixed to the location where it has the supporter of said closing motion aerofoil which supports an end respectively, and this supporter serves as the inside [ring / said] by the longitudinal direction of said body frame. While said closing motion aerofoil is supported by the part of said supporter and the end rocks it to the hoop direction of said ring respectively at the time of mounting of said holder The plastic surgery guide of the loose-leaf notebook used for the ring file characterized by making it extend exceeding the broken line on which it changes into the condition of having extended on both sides of this cover at the time of expansion of said cover, and the free end accomplishes said both edges in back respectively.

[Claim 3] It is made the ring file which fixed the file ** implement which has a half-segmented ring behind this cover by the inside of the cover in which the broken line was formed. The holder attached in the body frame which is the plastic surgery guide which brings near the ulnar margin of a loose-leaf notebook by the crowning side of said ring at the time of close [of said cover], and accomplishes the base of said file ** implement, It is fixed to the location where it changes with the closing motion aerofoils of the couple which made rockable and was prepared in this holder, among these said holder has the mounting section attached in said body frame with elasticity, and the supporter of said closing motion aerofoil which supports an end respectively, and this supporter serves as the inside [ring / said] by the longitudinal direction of said body frame. Moreover, while said closing motion aerofoil is supported by the part of said supporter and the end rocks it to the hoop direction of said ring respectively at the time of mounting of said holder The plastic surgery guide of the loose-leaf notebook used for the ring file characterized by making it extend exceeding the broken line on which it changes into the condition of having extended on both sides of this cover at the time of expansion of said cover, and the free end accomplishes said both edges in back respectively.

[Claim 4] The plastic surgery guide of the loose-leaf notebook used for the ring file indicated to claim 2 or claim 3 which equipped the holder with a lock means to regulate the splash of the closing motion aerofoil of a couple.

[Translation done.]